

(19)



JAPANESE PATENT OFFICE

PATENT ABSTRACTS OF JAPAN

(11) Publication number: **05109975 A**

(43) Date of publication of application: **30.04.93**

(51) Int. Cl.

**H01L 25/065**

**H01L 25/07**

**H01L 25/18**

(21) Application number: **03264522**

(22) Date of filing: **14.10.91**

(71) Applicant: **HITACHI LTD**

(72) Inventor: **KONO RYUJI  
NISHIMURA ASAO  
YAGUCHI AKIHIRO  
OBATA MAYA**

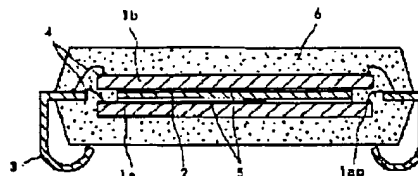
**(54) RESIN-SEALED TYPE SEMICONDUCTOR  
DEVICE**

(57) Abstract:

**PURPOSE:** To simplify a process by joining a junction plate with a circuit forming surface of a first semiconductor element via an insulating member to be wire-bonded and by joining a non-circuit-forming surface of a second semiconductor element to the opposite side of the junction plate via an insulating member to be wire-bonded.

**CONSTITUTION:** While a semiconductor element 1a with a circuit forming surface facing upward is mounted, a lead frame comprising an assembly of a junction plate 2 having smaller size than the semiconductor element 1a and having insulating members 5 on both sides and a lead 3 is mounted and joined so that an electrode pad lap is exposed. Then, a wire 4 is used to electrically connect the semiconductor element 1a to the lead 3. Then, a semiconductor element 1b is mounted and joined from an upper part of the junction plate 2 with a circuit forming surface facing upward, and the wire 4 is used to electrically connect the semiconductor element 1b to the lead 3. The assembly is sealed by resin 15 and molded with an unnecessary part of the lead 3 cut off. Thus, a manufacture process can be simplified.

COPYRIGHT: (C)1993,JPO&Japio



**BEST AVAILABLE COPY**